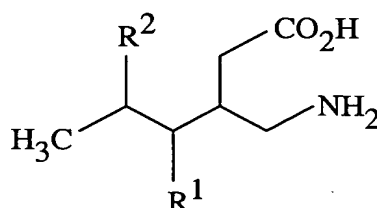


CLAIMS

What is claimed is:

1. A method for treating a disorder in a mammal, including a human, comprising administering to said mammal a therapeutically effective amount of a compound of the formula 1



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or a pharmaceutically acceptable salt thereof, wherein:

R¹ is hydrogen, straight or branched alkyl of from 1 to 6 carbon atoms or phenyl; and

R² is straight or branched alkyl of from 4 to 8 carbon atoms, straight or branched alkenyl of from 2 to 8 carbon atoms, cycloalkyl of from 3 to 7 carbon atoms, alkoxy of from 1 to 6 carbon atoms, -alkylcycloalkyl,, -alkylalkoxy, -alkyl OH, -alkylphenyl, -alkylphenoxy, or -substituted phenyl; and wherein said disorder is selected from OCD, phobias, PTSD, restless legs syndrome, premenstrual dysphoric disorder, hot flashes, and fibromyalgia.

2. A method for treating a disorder in a mammal, including a human, comprising administering to said mammal a therapeutically effective amount of the compound (3S, 5R)-3-Aminomethyl-5-methyl-octanoic acid or a pharmaceutically acceptable salt thereof wherein said disorders is selected from OCD, phobias, PTSD, restless legs syndrome, premenstrual dysphoric disorder, hot flashes, and fibromyalgia.

3. The method according to claim 2 wherein said disorder is selected from restless legs syndrome, premenstrual dysphoric disorder, hot flashes, and fibromyalgia.

4. The method according to claim 2 wherein said disorder is fibromyalgia.

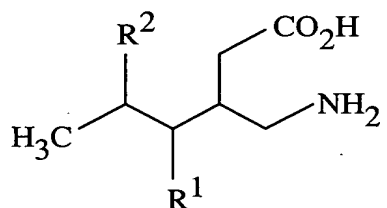
5. The method according to claim 1 wherein said disorder is selected from restless legs syndrome, premenstrual dysphoric disorder, hot flashes, and fibromyalgia.

6. The method according to claim 2 wherein said disorder is selected from restless legs syndrome, premenstrual dysphoric disorder, hot flashes, and fibromyalgia.

7. The method according to claim 1 wherein said disorder is selected from OCD, PTSD, and phobia; and wherein said phobia is selected from agoraphobia and specific phobias.

8. The method according to claim 2 wherein said disorder is selected from OCD, PTSD, and phobia; and wherein said phobia is selected from agoraphobia and specific phobias.

9. A method for treating fibromyalgia and a concomitant disorder in a mammal, including a human, comprising administering to said mammal a therapeutically effective amount of a compound of the formula 1



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or a pharmaceutically acceptable salt thereof, wherein:

R¹ is hydrogen, straight or branched alkyl of from 1 to 6 carbon atoms or phenyl; and

R² is straight or branched alkyl of from 4 to 8 carbon atoms, straight or branched alkenyl of from 2 to 8 carbon atoms, cycloalkyl of from 3 to 7 carbon atoms, alkoxy of from 1 to 6 carbon atoms, -alkylcycloalkyl, -alkylalkoxy, -alkyl

OH, -alkylphenyl, -alkylphenoxy, or -substituted phenyl; and wherein said concomitant disorder is selected from migraine headaches, temporomandibular joint dysfunction, dysautonomia, endocrine dysfunction, dizziness, cold intolerance, chemical sensitivity, sicca symptoms, cognitive dysfunction, generalized anxiety disorder, premenstrual dysphoric disorder, irritable bowel syndrome, functional abdominal pain, neuropathic pain, somatoform disorders, OCD, phobias, and PTSD.

10. A method for treating fibromyalgia and a concomitant disorder in a mammal, including a human, comprising administering to said mammal a therapeutically effective amount of the compound (3S, 5R)-3-Aminomethyl-5-methyl-octanoic acid or a pharmaceutically acceptable salt thereof wherein said concomitant disorder is selected from migraine headaches, temporomandibular joint dysfunction, dysautonomia, endocrine dysfunction, dizziness, cold intolerance, chemical sensitivity, sicca symptoms, cognitive dysfunction, generalized anxiety disorder, premenstrual dysphoric disorder, irritable bowel syndrome, functional abdominal pain, neuropathic pain, somatoform disorders, OCD, phobias, and PTSD.

11. The method according to claim 9 wherein the compound administered is selected from

(3S,5R)-3-Aminomethyl-5-methyl-nonanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-decanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-undecanoic acid, and
(3S,5R)-3-Aminomethyl-5-methyl-dodecanoic acid;
or a pharmaceutically acceptable salt thereof.

12. The method according to claim 10 wherein the compound administered is selected from

(3S,5R)-3-Aminomethyl-5-methyl-nonanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-decanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-undecanoic acid, and
(3S,5R)-3-Aminomethyl-5-methyl-dodecanoic acid;

or a pharmaceutically acceptable salt thereof.

13. The method according to claim 8 wherein said concomitant disorder is generalized anxiety disorder, premenstrual dysphoric disorder, a somatoform disorder, irritable bowel syndrome, functional abdominal pain, neuropathic pain, or migraine headache.

14. A method of increasing slow wave sleep in a human subject being treated with an active pharmaceutical agent that decreases slow wave sleep comprising administering to a human subject in need of such treatment:

(a) a compound of the formula 1, as defined in claim 1, or a pharmaceutically acceptable salt thereof; and

(b) a human growth hormone or human growth hormone secretagogue, or a pharmaceutically acceptable salt thereof;

wherein the amounts of the active agents "a" and "b" are chosen so as to render the combination effective in increasing slow wave sleep.

15. A method of increasing slow wave sleep in a human subject being treated with an active pharmaceutical agent that decreases slow wave sleep comprising administering to a human subject in need of such treatment:

(a) the compound (3S, 5R)-3-Aminomethyl-5-methyl-octanoic acid or a pharmaceutically acceptable salt thereof; and

(b) a human growth hormone or human growth hormone secretagogue, or a pharmaceutically acceptable salt thereof;

wherein the amounts of the active agents "a" and "b" are chosen so as to render the combination effective in increasing slow wave sleep.

16. A method of increasing slow wave sleep in a human subject comprising administering to a human subject in need of such treatment:

(a) a compound of the formula 1, as defined in claim 1, or a pharmaceutically acceptable salt thereof; and

(b) a human growth hormone or human growth hormone secretagogue, or a pharmaceutically acceptable salt thereof;

wherein the amounts of the active agents "a" and "b" are chosen so as to render the combination effective in increasing slow wave sleep.

17. A method of increasing slow wave sleep in a human subject comprising administering to a human subject in need of such treatment:

(a) the compound (3S, 5R)-3-Aminomethyl-5-methyl-octanoic acid or a pharmaceutically acceptable salt thereof; and

(b) a human growth hormone or human growth hormone secretagogue, or a pharmaceutically acceptable salt thereof;

wherein the amounts of the active agents "a" and "b" are chosen so as to render the combination effective in increasing slow wave sleep.

18. The method of claim 1 wherein said compound is selected from:

(3S,5R)-3-Aminomethyl-5-methyl-nonanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-decanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-undecanoic acid, and
(3S,5R)-3-Aminomethyl-5-methyl-dodecanoic acid;
or a pharmaceutically acceptable salt thereof.

19. The method of claim 9 wherein said compound is selected from:

(3S,5R)-3-Aminomethyl-5-methyl-nonanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-decanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-undecanoic acid, and
(3S,5R)-3-Aminomethyl-5-methyl-dodecanoic acid;
or a pharmaceutically acceptable salt thereof.

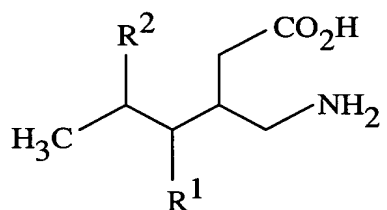
20. The method of claim 14 wherein said compound is selected from:

(3S,5R)-3-Aminomethyl-5-methyl-nonanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-decanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-undecanoic acid, and
(3S,5R)-3-Aminomethyl-5-methyl-dodecanoic acid;
or a pharmaceutically acceptable salt thereof.

21. The method of claim 16 wherein said compound is selected from:

(3S,5R)-3-Aminomethyl-5-methyl-nonanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-decanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-undecanoic acid, and
(3S,5R)-3-Aminomethyl-5-methyl-dodecanoic acid;
or a pharmaceutically acceptable salt thereof.

22. A method for treating a disorder in a mammal, including a human,
comprising administering to said mammal a therapeutically effective amount of a
compound of the formula 1



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or a pharmaceutically acceptable salt thereof, wherein:

R¹ is hydrogen, straight or branched alkyl of from 1 to 6 carbon atoms or
phenyl; and

R² is straight or branched alkyl of from 4 to 8 carbon atoms, straight or branched
alkenyl of from 2 to 8 carbon atoms, cycloalkyl of from 3 to 7 carbon atoms,
alkoxy of from 1 to 6 carbon atoms, -alkylcycloalkyl, -alkylalkoxy, -alkyl OH, -
alkylphenyl, -alkylphenoxy, or -substituted phenyl wherein said disorder is pain
associated with restless legs syndrome.

23. The method of claim 22 wherein said compound is selected from:

(3S,5R)-3-Aminomethyl-5-methyl-nonanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-decanoic acid,
(3S,5R)-3-Aminomethyl-5-methyl-undecanoic acid, and
(3S,5R)-3-Aminomethyl-5-methyl-dodecanoic acid;
or a pharmaceutically acceptable salt thereof.

24. A method for treating a disorder in a mammal, including a human, comprising administering to said mammal a therapeutically effective amount of the compound (3S, 5R)-3-Aminomethyl-5-methyl-octanoic acid or a pharmaceutically acceptable salt thereof; wherein said disorder is pain associated with restless legs syndrome.